Detailed Meeting Notes
Hamilton Army Airfield Restoration Advisory Board
Hamilton School, Multi-Purpose Room,
Novato, California
August 28, 2002

Attendance

RAB Members Present:

Thomas Macchiarella; Naomi Feger; Jim McAlister; Theresa McGarry; Jim Ponton; Marucia Britto; Preston Cook; Patricia Eklund; Tunstall Lang; Matthew McCarron, Joan Dekelboum, Manuel Mier.

RAB Members Absent:

Ray Seid; Richard A. Draeger; Sabrina Molinari; Karol Raymer; Jack Walton; Lance McMahan; Ed Keller; Ray Zimny; Thomas Hinman;; Sabrina Molinari;.

Others Present:

Joy Lanzaro; Hugh Ashley; Sigalle Rosner; Travis Williamson; Ray Landi; Don Koors; John Kaiser; Mel Nunes; [?] Fitzgerald; Cynthia Barnard; Jim Davies; T. Maxwell; Wally Bobkiewicz; Thom Gamble; Tom Roth; Gail Grasso, Patricia Ryan.

Welcoming Remarks

Tunstall Lang welcomed the community to the August 28, 2002 meeting of the Hamilton Army Airfield Restoration Advisory Board (RAB). The meeting began at 7:12 p.m.

Navy BRAC Update — Thomas Macchiarella, DODHF Novato BEC

Site Status Report:
Mr. Macchiarella reported on the results of the latest quarterly monitoring from May 2002. A Site Status Report is conducted every quarter, and the main contaminants found in the groundwater are benzene and MTBE. Monitoring has shown that the average concentration of benzene and MTBE in the groundwater is decreasing. The contaminants have not migrated substantially since the shape of the MTBE plumes have not changed very much.

Patricia Eklund: Does the plume look longer than it was a year ago?
Mr. Macchiarella: The natural direction of the groundwater is northward which is why the plume has gone that in that direction. The different shades in the plume represent different concentrations of MTBE, with yellow indicating the highest concentration. The northernmost part of the plume shows a very low concentration of MTBE, and there are only two or three wells in that area. A few of the northern most wells have increased in concentration, however nothing has been detected in the northenmost well that is being monitored.

Ms. Eklund: Why does the plume cut off in a straight line at the north. I've never seen a plume that does that?
Mr. Macchiarella: That's just an artifact of the modeling and the graphics. Further south we have a whole lot of wells and more data, so the computer program can do a lot more graphically as a result. In the northern area there are fewer wells and less data, so the computer graphics are less detailed.

Matthew McCarron: How do your numbers match up to the clean-up goals?
Mr. Macchiarella: Our newest data points show a general decreasing trend over time in the average maximum concentrations of benzene and MTBE. The dissolved mass of MTBE and benzene in groundwater has also continued to decrease over time. Mr. Macchiarella said that additional detail on clean-up goals is forthcoming in the presentation.

Remediation System:
The remediation system is installed and will be ready to use after a few minor alterations. The objective of the remediation system is to stabilize and contain the MTBE plume on Navy property and to reduce the time required to achieve the maximum contaminant levels (MCL) for all gasoline constituents in the groundwater. MCLs are the same as drinking water standards. So the long-term goal is to bring the plume down to drinking water standards. This doesn't happen overnight, and the sparging system won't entirely achieve that completely. After the system has reached its potential, we will enter the natural attenuation phase, where indigenous microbes will take care of the rest of the contamination.

Question: What is estimated time to complete this system?
Mr. Macchiarella: The biosparging system will take 1.5 to 2 years. Monitoring natural attenuation may last from five to tens of years.

Patricia Eklund: What is the MCL for MTBE?
Jim Ponton: The drinking water standard is 13 ppb and the secondary is 5 ppb. (Secondary standard refers to the level at which a constituent could be tasted or smelled, although it wouldn't be harmful to ingest. The secondary is normally higher than the drinking water standard, but it isn't in this case.) Presently, the maximum concentration in the plume is at 27,000 ppb. Pat, you were correct that the plume has elongated somewhat to the north, but what I focus on is the yellow portion of the plume, which represents concentrations of 10,000 ppb or more. That is the area that we are trying to focus on and remediate so that it doesn't migrate downgradient.

Mr. McCarron : The primary MCLs are based on human health risk, correct?
Mr. Ponton: Yes.

Mr. McCarron : And fish toxicity?
Mr. Ponton: I believe that the fresh water numbers are 8,000 ppb and salt water 66,000ppb. So they are significantly different. As part of this exercise, the Navy

monitors several locations in the creek, upgradient and downgradient of the site and they will continue long term monitoring to ensure that no problems exist.

Treatment System:
The treatment system is focused on wells just to the north of the 10,000 ppb contour. This area of 10,000 ppb concentration is trying to move downgradient to the north, but it will run into the treatment system before it reaches the property boundary. Most of the mass of MTBE in the plume remains in the 10,000 contour. Conveniently, the 10,000 ppb contour is centered in sandy soil. Biosparging is more effective in sandy soil than other, more dense soil types.

Subsurface installations of the biosparging system include: 49 sparging wells, five performance monitoring wells, and eight soil vapor extraction (SVE) wells. The soil vapor extraction system was installed and is ready to be used if needed, but is not expected to be used. Thirteen new soil gas probes have also been installed to monitor the system performance and monitor the edges of the property. Most of the biosparging system is underground, so the components are not visible.

For the Start-up Shakedown and Baseline Conditions, there were 56 groundwater wells sampled for MTBE concentrations. The maximum concentration recorded was 29,000 ppb, with the average being 14,000 ppb. Twenty soil-gas monitoring probes were also sampled. The Navy also tested the new sparging wells separately in a well-by-well shakedown testing performed from July 13 through July 17, 2002. The testing was to ensure that the wells could deliver the required flow and pressure.

Future Activities:
The system start up should occur the week of September 9th. There will be extensive monitoring conducted while the system is operating. The next quarterly groundwater monitoring will be performed in November 2002.

Ms. Dekelboum: Does the system make a great deal of noise?
Mr. Macchiarella: No, it does not make a lot of noise. You wouldn't put this right next to someone's house, but there aren't any houses nearby anyway. The daycare and charter school are the closest neighbors but they should not notice the operation of the system.

Ms. Britto: Will the system be operating 24 hours a day?
Mr. Macchiarella: Yes.

Mr. Macchiarella: To answer the rest of Mr. McCarron's question, currently, the highest MTBE concentration is 20,000 ppb or so. The sparging system will reduce this by 95% or more (to 800-900 ppb). The final cleanup goals, which are MCLs, will be addressed through monitored natural attenuation.

Question: What is the approved concentration for MTBE and Benzene?
Mr. Macchiarella: The Navy is aiming for the MCL. The MCL being targeted for MTBE is 13 parts per billion (13 ppb). The MCL for Benzene is one part per billion (1 ppb).

Mr. McCarron: How is the system pumped?
Mr. Macchiarella: The system will be run by a regular electric hook up.

Landfill 26, GSA, and North Antenna Field - Jim McAlister, USACE

Landfill 26

Buffer Trench:
The purpose of the buffer trench is to separate the landfill from Hamilton Meadows. The trench goes three feet into groundwater or to bedrock, which ever was encountered first. The trench is filled with gravel and has vent pipes that are connected to a collection tube in the trench to vent methane to the ambient air. The Army will also install an impermeable barrier to prevent the methane from traveling linearly down the length of the trench. The entire length of trench and collection tube has now been installed. The barrier will be installed in mid-October. The barrier consists of sheets of HDPE plastic that are driven into the trench at regular intervals.

Ms. Lang: What if the rainy season starts early?
Mr. McAlister: The Army can install pads for the cranes. The ground water level would not affect the installation process.

Risk Assessment:
The overall conclusion of the risk assessment is that it is safe to live in Hamilton Meadows. The lifetime cancer risk ranges from five in one billion to four in one million. The exposure to VOCs measured in the soil gas does not pose a health risk in indoor or outdoor air for residents or construction workers. In fact, the level of the constituents in the ambient air is far greater than what we measured in the soil gas.

Mr. McCarron: Why are the ranges so broad?
Mr. McAlister: The range covers many different constituents that the Army analyzed. The concentration of each constituent in 21 different soil gas probes was analyzed in the risk assessment. The highest risk identified was four in one million and the lowest was five in one billion. Any risk identified that is lower than one in ten thousand requires action to be taken. Anything from one in tem thousand to one in one million is a risk management area, and anything above one in one million requires no further action. So the average of four in one million is over the line, but the one in one million is not a bright red line that says that something has to be done. The risk assessment recommendation is that the Army continues to monitor this area to ensure that the levels are stable or decreasing.

The landfill and Hamilton Meadows will continue to be monitored for methane. Quarterly samples will be taken at all the probes used in the risk assessment over the next year to ensure there is no upward trend. At the end of the year, the regulators will determine whether further action is needed. The buffer trench will be monitored quarterly for methane and VOCs. The Army will also monitor groundwater through the entire

landfill and north and east of the landfill. Additional funding was received for extensive groundwater monitoring to ensure nothing is leaving the landfill that could possibly affect the wetlands. The Army will conduct extensive analysis of VOCs, pesticides, metals, and petroleum.

Timeframes

Impermeable Barrier is to be installed in the buffer trench in October 2002.

The risk assessment is due to be completed in September 2002.

Compliance with Board Order will be achieved in 2005-2008.

RWQCB permit compliance will begin in 2008.

Monitoring of the landfill will continue throughout this time period.

North Antenna Field:
Ten areas were identified as areas of concern: small arms ranges, pistol range, skeet range, three burn pits, an above ground storage pits, and septic systems. The primary contaminants of concern are lead, PNAs-incomplete burnings, petroleum, dioxin/furans, PCBs, and low levels of VOCs in the septic systems.

Timeframes:
Remedial investigation- The regulators recommended additional testing for lead in the coastal salt marsh and for copper in some of the antenna grids. The Army expects to complete this testing in October 2002.
Ecological Risk assessment- completed by December 2002
Feasibility study- January 2003
OE clearance- October 2003 – (40 millimeters practice grenades were found and they need to be cleared)
Decision document- November2003
Remedial action- October 2005
Wetland earliest arrival- 2006

Mr. Roth: Who owns the North Antenna Field?
Mr. McAlister: California State Lands Commission owns this property

Mr. McCarron: Is the jump between decision and legal action for funding reasons?
Mr. McAlister: It is a funding issue. There has been a large amount of lead found on site, and it will have to be hauled off site, which will be expensive. The Army will likely have to encapsulate the lead so that it wouldn't be bio-available.

Ms. Lang: This is an ambitious schedule for completing the Remedial Investigation and Risk Assessment. Are these studies currently being worked on?
Mr. McAlister: The Remedial Investigation is underway and 90 percent of data needed has been collected. The draft Risk Assessment has not yet been released. The December 2002 timeframe is for final submittal to the agencies, prior to public release.

Ms. Feger: Did the draft Remedial Investigation go to the RAB?
Mr. McAlister: The draft has only been released for agency review.

Army BRAC Update: Hugh Ashley, BRAC Environmental Coordinator (BEC)

Documentation and Field Work

Documentation

Main Airfield Parcel:

- Record of Decisions/Remedial Action plan (ROD/RAP) – The document had suggested modifications for the regulators and it is currently under discussion with DTSC.
- Finding of Suitability for Early Transfer (FOSET) – Discussions are continuing with DTSC. The FOSET needs to be finalized before transfer of the property can go forward.
- Environmental Baseline Survey (EBS) – The survey was forwarded to the regulators for review on March 28, 2002. This document is contingent upon the other documents that are currently being negotiated, so that is probably why we haven't heard back yet.

Ms. Eklund: What kind of comments did the regulatory agencies have on the ROD/RAP?
Mr. Ashley: I'm speculating, but I believe that the attorneys disagree on authorities and DTSC questions the Army's plan for how they are going about providing a solution to getting wetland underway.
Ms. McGarry: I'm on the periphery of these meetings. We have had a lot of meetings on the ROD/RAP and the Army has submitted a Memorandum of Agreement (MOA) and DTSC has commented on that. We are now briefing our management on the inadequacies of the MOA. It is still being negotiated.
Ms. Feger: The Coastal Conservancy is anxious to take title to the property and move forward. The Army and DTSC just need to agree on the MOA. The Army has now submitted a revised MOA based on DTSC's comments and they are continuing to discuss it.
Ms. Eklund: Can you give us an idea of what some of the outstanding issues are?
Ms. Feger: A lot of issues relate to how the project will move forward, because it's very unusual set of circumstances where you have a remedial action and then you have a civil works project. So there are issues around how the Army completes closure of the surface sites and what requirements are put on the wetland restoration process. Because it is a civil works project it is handled by a different part of the Army: the BRAC is doing the clean-up while the San Francisco district will manage the civil works project. There are some sites with residual contamination that still need to be addressed, and then dredge material is going to be brought in and that is the major ROD/RAP issue, that the dredge material will act as a cover for the residual contamination. The only other outstanding issue has to do with the fact that there are some area-wide pesticides and some PNAs due to some tar seams (between slabs of concrete) on the runways. The Army has taken the position that these are not CERCLA releases, so DTSC and the Army have differing

opinions on how to approach clean-up. The Regional Board has said it can be addressed as part of our permit process. We are all trying to work through how best to accomplish this.
Mr. Ashley: Also, you can call Ed Keller when he gets back to get more information.

Mr. Roth: How frequently are the Army and DTSC meetings?
Mr. Ashley: They meet monthly or every six weeks or so. The last time they met was in June.
Ms. Feger: They are also meeting one on one, and those meetings can occur at anytime.
Ms. Eklund: Why is the Army taking so long to respond to some of the issues being raised?
Mr. Ashley: I can't answer that.
Ms. McGarry: The Army has responded, and we are now reviewing and responding to the Army's revisions.
Ms. McGarry: You can call Lance McMahan for more information.
Mr. McCarron: How far is the US Fish and Wildlife Service (USFW) in the process?
Ms. Feger: They are involved. They are working on developing the biological opinion for the wetland restoration. It is a complicated process and it complicated further because of the addition of the Bel Marin Keys EIR that was recently issued.
Mr. Ashley: They have been involved all along, reviewing documents. They have been known to come in at the last minute and say "No, you can't do that." Until you get something in writing from them there is nothing you can do. There were agreement made back in September 1999 between the Army and USFWS of how this process would proceed in phases, but USFWS personnel has changed since then.
Ms. Feger: The process requires a Biological Assessment (BA), and the Army submitted that two months ago, so they have that now and have 135 days to process it.
Mr. Ashley: I'm not sure formal consultation is open yet. They had a number of questions on the BA.
Ms. Feger: They may be able to extend the time limit based on that but
Mr. Ashley: We also have two new USFWS people on our project: David Wooten who deals with environmental species, and Becky Stanton who is more toxicology related. Mr. Keller will meet with Becky and perhaps David to bring them up to speed on the project.
Ms. Feger: USFWS can put terms and conditions on the project.

Hospital Hill:
The Army has signed the FOST, and transfer to the City of Novato is expected at the end of September. The City attorney is currently negotiating the deed language. The Army plans to accept the offer from the City

POL Hill:
The data report for the second round of groundwater sampling was completed in February and was provided to the regulators for review on July 10, 2002. We haven't heard from the regulators yet, but the final set of sampling has now been completed under that sampling contract.

Coastal Salt Marsh:

- Feasibility Study – The study was forwarded for regulatory review on April 24, 2002. The Army continues to work with the regulators to resolve comments.
- Sampling Data Report – Currently in internal review by the Army. Mr. Ashley indicated that he should receive internal comments this week and should be able to distribute it to the regulators by the end of next week.
- Proposed Plan – in internal review by the Army. The plan is scheduled for public review later this year, most likely in December.

Field Work

Building 82:

The workplan for Building 82 was submitted to regulators. Comments were received and have been resolved. The problem there was a transformer pad that was cleaned up in 1998 and there was some residual contamination was cleaned-up in 1999. In the process of that clean-up the Army discovered some additional hydrocarbons in the soil. Field work to address this final clean-up will start September 9th. The Army plans to complete the sampling work in one day. The Army plans to do groundwater sampling and some soil sampling based on the groundwater results.

Removal of Asbestos:

The Army had a fairly large contract that was finished last winter, except for three areas: a boiler, floor tiles, and 70 feet of pipe wrap. Two of those areas have been cleaned up as of today. Clean-up of the third area will begin on the 3rd or 4th of September.

Last winter the Army completed remedial actions at Building 41, which is now gone. AT Spoils pile F the contaminants of concern were metals and pesticides. At revetments 6 and 7 were petroleum products and PNAs. All excavations were completed and confirmation samples collected, indicating that the Army was successful in removing the contamination. Soil stockpiles from those excavations is still on site at revetments 1 through 4 and the Army plans to remove them during the next remedial action.

Main Airfield Parcel:

All excavations completed and confirmation samples were collected, indicating that the actions were very successful. Soil disposition is ongoing. The Army review of the construction report is complete and Agency review should begin this summer.

POL Hill:

The third and final round of monitoring samples have been collected. The results will be forwarded and discussed with the regulators this September. The discussion will determine future monitoring requirements.

Monitoring wells – Efforts are ongoing to complete the removal of unused monitoring wells from all Army BRAC property.

Next Steps

Inboard property:

- Complete removal of stockpiled soil for remedial actions as defined in the ROD/RAP.
- Complete the finding of Suitability for Early Transfer (FOSET) based on ongoing discussions between the Army and DTSC.
- Complete the EBS.
- Transfer the property.

Coastal salt marsh:

- Soils were analyzed to determine the extent of the remedial actions that will be necessary. The sampling data report will come out next week or the following week
- Complete Feasibility Study, which will present alternatives for remediation. This is one of the documents currently being discussed by the Army and DTSC.
- Complete the proposed plan, which will present the recommended remedial alternatives.
- Prepare the decision document, which will document the selected remedy.
- Implement the remedial actions.

The Army has identified about 30 discreet sites in eight locations in the coastal salt marsh where excavation will be required. The Army needs USFWS to agree with the approach, and needs to develop an approach to accomplish these actions that will be acceptable, perhaps using a helicopter to bring equipment in so that effects to the sensitive habitat is minimized.

Mr. Cook: What is status on parcel A4?
Ms. Feger: The Water Board is waiting to get a report on the final disposition of the pipeline.

Ms. Eklund: How much pipe is going to remain?
Ms. Feger: There are two 60-foot pieces. It will either be capped in place or removed.
Mr. Davies: Once the property is transferred, then they will do specific plans on what will be built there and that will determine what will happen with pipes.
Mr. Ashley: The Army needs to get a sign-off letter from DTSC, then the Army needs to get the FOST signed and then the real estate documents transferring the property can be recorded.
Mr. Cook: Do you have an estimate of timing? Two months? Six months?
Mr. Ashley: You would need to ask DTSC.
Ms. McGarry: I'm not sure where we are on this.
Mr. Ashley: If you call me tomorrow I will give you Lance McMahan's phone number and you can ask him directly. Mr. Keller will also be back next week.

Mr. Ponton: What is the status of funding that representative Woolsey assisted in obtaining for the USACE?
Mr. McAlister: We are coordinating with the agencies on our workplan for additional sampling and analysis.

Mr. Ponton: Any idea when you will be out in the field?
Mr. McAlister: We are hoping for late September or October.

Regulatory agencies comments

Ms. McGarry: Mr. McMahan did write a letter on the alleged dumping issue. There was an allegation that there was a dumping ground on Navy property. Mr. McMahon interviewed that person and the Navy did some additional research on this issue. Out of the Navy's good work, the DTSC agrees with the Navy that there doesn't appear to be any evidence of dumping. A letter was sent to the Navy agreeing with their investigation.

Mr. Ponton: Introduced John Kaiser, who is Ms. Feger's and Mr. Ponton's new boss.
John Kaiser: I have had an opportunity to review some of the correspondence and reports, and I appreciate the high quality of work. I would like to see that maintained.
Mr. Ponton: I'd also like to thank Tom Roth again and Representative Woolsey for the funding to complete the trench and to continue monitoring that will ease people's concerns.

In the Navy's last annual report they requested a reduction in monitoring in groundwater wells that have had low concentrations over the past several years in which the Navy has conducted quarterly monitoring. The Water Board approved this request and asked for a couple more things that the Navy is now working on. We are very pleased that the system has been installed in the landfill and the gas station.

Ms. Lang: The next meeting will be held on October 16th, 2002. Also would like to thank, in absentia, Mr. Andre Klein for his participation on the RAB. He has submitted his letter of resignation.He has been a RAB member since the beginning of the RAB.

Mr. Ashley: Does this mean that the RAB will be opening up for new membership?

Ms. Lang: His position is now open, but we need to discuss how to proceed with applicants. The committee will discuss in October. And we will have the list of applicants that have applied before.

Ms. Lanzaro: The RAB assesses membership every two years, in September. At that time, the RAB decides if they want to accept new applications, and if so, we send out notices that the RAB is accepting applications.

Ms. Lang: When is next mailing going out?
Ms. Lanzaro: The next newsletter will probably go out in October.
Ms. Lang: Lets get something in that about the open RAB positions and reassemble the selection committee.
Ms. Eklund: Lets discuss this as a group in October. We can go through who is active and who is not.
Ms. Lang: We will add it to the October agenda.